AS 4373—1996

Australian Standard®

Pruning of amenity trees

This Australian Standard was prepared by Committee CS/90, Horticulture. It was approved on behalf of the Council of Standards Australia on 29 January 1996 and published on 5 May 1996.

The following interests are represented on Committee CS/90:

Arboricultural Association of Australia (Vic.)

Australian Institute of Horticulture

Australian Nature Conservation Agency

Electricity Supply Association of Australia

Flower Export Council of Australia

National Arborists Association of Australia

Nursery Industry Association of Australia

Royal Australian Institute of Parks and Recreation

Victorian College of Agriculture and Horticulture

Additional interests participating in preparation of Standard:

Local Government Tree Resources Association

Ryde College of Technical and Further Education

Arboricultural Association of Western Australia

This Standard was issued in draft form for comment as DR 91068.

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard®

Pruning of amenity trees

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) 1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7337 0387 9

PREFACE

This Standard was prepared by the Standards Australia Committee CS/90 on Horticulture, to provide guidelines for the pruning of trees.

The recommendations given in this Standard are intended to apply specifically to urban and amenity trees, but exclude pruning for fruit production and silviculture.

In the preparation of this Standard, cognizance was taken of reference sources from the International Society of Arboriculture Certification Committee, Dr Alex Shigo, The Arboricultural Association of Australia, The Arboricultural Association of Western Australia, Ryde T.A.F.E. (Division of Horticulture), Burnley College and The National Arborists Associations of Australia and America.

The objective of this Standard is to provide tree workers, government departments, property owners, and contractors with a guide defining uniform tree pruning procedures and practices in order to minimize the impact of pruning on trees.

CONTENTS

Page

FO	REWORD	3
1	SCOPE	4
2	APPLICATION	4
3	DEFINITIONS	4
4	CONSIDERATIONS BEFORE PRUNING	5
5	PRUNING PROCEDURES	5
6	FOLIAGE DISTRIBUTION	6
7	PRUNING TYPES AND CLASSES	9
8	CROWN MAINTENANCE	9
9	CROWN MODIFICATION	10
10	LOPPING AND TOPPING	12

First published as AS 4373-1996.

© Copyright - STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

FOREWORD

The intention of this Standard is to encourage pruning practices and procedures that reduce the risk of hazard development, branch failure, fungal infection or premature tree death.

Trees often require pruning to maintain clearance for utility services and buildings or to improve the safety, structure, health and beauty of the tree.

The procedures in this Standard are based on the widely accepted theories of compartmentalization of decay in trees. Lopping, topping or flushcutting are unacceptable practices.

Pruning should be carried out by tree workers who through related training, on-the-job experience and qualifications are familiar with the principles, techniques and hazards of this work. Root pruning is beyond the scope of this Standard. However, should the need arise, expert guidance should be obtained regarding root pruning and excavation around and near trees. Root damage can result in death, disease or instability to the tree.

STANDARDS AUSTRALIA

Australian Standard Pruning of amenity trees

1 SCOPE This Standard describes methods for pruning of trees and encourages correct and uniform practices. It is intended for use on amenity trees and includes formative pruning, hazard reduction, selective pruning and thinning. It does not include practices related to timber, foliage, fruit and flower production, root pruning, chemical pruning nor to sculptural forms of pruning such as topiary hedging and pleaching. The Standard also excludes information on wildlife habitat and safety of the tree worker.

2 APPLICATION This Standard is intended for use by tree workers, government departments, building contractors and others involved with contractual arrangements for tree pruning. The Standard will also serve as a guide for property owners and others who specify pruning procedures or alternatively who wish to carry out work of this nature themselves.

3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

3.1 Bark — all tissue outside the vascular cambium. Bark is usually divided into inner bark-active phloem and aging and dead crushed phloem.

3.2 Branch—organ which supports leaves, flowers and fruit.

3.3 Branch bark ridge—raised or furrowed bark in the branch crotch that marks where the branch wood and trunk wood meet. Formed by compaction or expansion as the girth of the branch and trunk increase. (See Figure 1(b).)

3.4 Branch collar — trunk tissue that forms around the base of a branch between the main stem and the branch. As the branch decreases in vigour or begins to die, the branch collar becomes more pronounced. (See Figures 1(a) and 3.)

3.5 Bud—embryonic vegetative or reproductive tissue which may be terminal, axillary or adventitious in origin. Buds can be active or dormant.

3.6 Codominant stems—stems or trunks of about the same size originating from the same position from the main stem. When the stem bark ridge turns upward the union is strong, when the ridge turns inward the union is weak. (See Figure 2.)

3.7 Compartmentalization—dynamic tree defence process involving protection features that resist the spread of pathogens.

3.8 Crown—portion of the tree consisting of branches and leaves and any part of the trunk from which branches arise.

3.9 Decay—degeneration and delignification of plant tissue, including wood, by pathogens or microorganisms.

3.10 Epicormic shoots—shoots produced by dormant buds within the bark or stems of a tree as a result of stress, lopping or increased light.

NOTE: Epicormic shoots usually have a weaker form of branch attachment.

3.11 Extruded bark—outwardly formed bark at the junction of branches or codominant stems.

3.12 Final cut—also referred to as target cut. This is the final cut in the process of the reduction or removal of branches and stems. The purpose of this final cut is to reduce the risk of microorganism infection according to the principles of compartmentalization and to encourage even wound closure. (See Figure 1.)



The remainder of this document is available for purchase online at <u>www.saiglobal.com/shop</u>

SAI Global also carries a wide range of publications from a wide variety of Standards Publishers:















Click on the logos to search the database online.